(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 22 September 2005 (22.09.2005)

PCT

(10) International Publication Number WO 2005/086661 A2

(51) International Patent Classification: Not classified

(21) International Application Number:

PCT/US2005/005815

(22) International Filing Date: 24 February 2005 (24.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/548,741 27 February 2004 (27.02.2004) US 60/601,579 12 August 2004 (12.08.2004) US

(71) Applicant (for all designated States except US): AMGEN INC. [US/US]; 1120 Veterans Boulevard, South San Francisco, CA 94080 (US).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): AKERMAN, Michelle [US/US]; 300 3rd Street #523, San Francisco,

CA 94107 (US). HOUZE, Jonathan [US/US]; 2383 Ticonderoga Drive, San Mateo, CA 94402 (US). LIN, Daniel, C., H. [US/US]; 107 Livorno Way, Redwood City, CA 94065 (US). LIU, Jiwen [CN/US]; 721 Celestial Lane, Foster City, CA 94404 (US). LUO, Jian [US/US]; 240 Klamath Street, Brisbane, CA 94005 (US). MEDINA, Julio, C. [US/US]; 1407 Cedar Street, San Carlos, CA 94070 (US). QIU, Wei [CN/US]; 974 Diaz Lane, Foster City, CA 94404 (US). REAGAN, Jeffrey, D. [US/US]; 540 Summit Springs, Woodside, CA 94062 (US). SHARMA, Rajiv [IN/US]; 5419 Shattuck Avenue, Fremont, CA 94555 (US). SHUTTLEWORTH, Stephen, J. [GB/GB]; 4 Thames Close, Bourne End, Buckinghamshire S18 5QJ (GB). SUN, Ying [CN/US]; 810 Ohlone Avenue, Apt. 823, Albany, CA 94706 (US). ZHANG, Jian [CN/US]; 808 Rigel Lane, Foster City, CA 94404 (US). ZHU, Liusheng [CN/US]; 2001 Trousdale Drive #211, Burlingame, CA 94010 (US).

- (74) Agents: INSOGNA, Anthony, M. et al.; Jones Day, 222 East 41st Street, New York, NY 10017-6702 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

[Continued on next page]

(54) Title: COMPOUNDS, PHARMACEUTICAL COMPOSITIONS AND METHODS FOR USE IN TREATING METABOLIC DISORDERS

$$Q-L^{1}-P-L^{2}-M-X-L^{3}-A$$
 (I)

(57) Abstract: The present invention provides compounds useful, for example, for modulating insulin levels in a subject and that have the general formula $Q-L^1-P-L^2-M-X-L^3-A$ wherein the definitions of the variables Q, L^1 , P, L^2 , M, X, L^3 and A are provided herein. The present invention also provides compositions and methods for use of the compounds, for instance, for treatment of type II diabetes.

WO 2005/086661 A2

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

ZM, ZW.

European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.